To: Etzel, Ruth[Etzel.Ruth@epa.gov]

From: Enck, Judith

Sent: Mon 4/20/2015 5:59:49 PM **Subject:** FW: Methyl Bromide

From: Evangelista, Pat

Sent: Monday, April 20, 2015 1:19 PM **To:** Jordan, William; Enck, Judith

Cc: Jones, Jim; Housenger, Jack; Dawson, Jeffrey; Vogel, Dana; Maddaloni, Mark

Subject: RE: Methyl Bromide

Ex. 5 - Deliberative

From: Jordan, William

Sent: Monday, April 20, 2015 12:59 PM

To: Enck, Judith

Cc: Jones, Jim; Housenger, Jack; Dawson, Jeffrey; Vogel, Dana; Evangelista, Pat; Maddaloni,

Mark

Subject: FW: Methyl Bromide

Judith -

I am forwarding you a chain of email messages from Jeff Dawson, our chief exposure scientist on the Methyl Bromide team in OPP. He has been talking with and providing information to your Region 2 staff, Pat Evangelista and Mark Maddaloni, about the circumstances under which it would be safe to allow renters to occupy the V.I. condominium units where MeBr has been used imporoperly.

In sum, Jeff advises that the air concentrations need to be at or below 1 ppm, when measured in the breathing zone of adults and children in each unit. In addition, we think it would be prudent to remove from the units any articles that might have absorbed and retained the MeBr gas.

While there is no labeling requirement relating to the types of articles that should discarded, OPP's advice is to discard any food not in sealed, unopened containers, and to discard feather pillows. To the extent there may be other articles suspected to retain MeBr gas (see, e.g., the APHIS PPQ Treatment Manual), we note that you could conduct additional air monitoring near the articles to determine whether they continue to release MeBr, and that you should apply the 1 ppm standard to those measurements as well. Finally, we advise using prudent aeration methods – opening all doors, windows, drawers, cabinets, closets, etc., and using active ventilation (fans) – if this has not already been done.

OPP staff and I are available to answer further questions.
Thanks,

Bill

William Jordan

Deputy Director, Programs

Office of Pesticide Programs

U. S. Environmental Protection Agency

Phone: 703-305-1049

Fax: 703-308-4776

Mailing Address: Courier Address:

USEPA Headquarters Potomac Yards South

Clinton Building 2777 Crystal Drive

1200 Pennsylvania Ave., NW Room 12-235

Mail Code (7501P)

Arlington, VA

Washington, DC 20460

From: Dawson, Jeffrey

Sent: Monday, April 20, 2015 9:33 AM **To:** Evangelista, Pat; Maddaloni, Mark

Cc: Friedman, Dana; Helfgott, Daniel; Keigwin, Richard; Jordan, William; Vogel, Dana;

Costello, Kevin

Subject: RE: Methyl Bromide

Pat & Mark,

Here is the additional information which I think addresses the rest of the list that we talked about last week.

Dana Friedman from our PRD Division provided me the following information about the clearance level which we are going to incorporate into updated labels (the update process is still ongoing).

The 2006 methyl bromide TRED required an aeration period for the treated commodity or space for structural fumigations until the concentration within the commodity or structure is no greater than 5 ppm and that fumigated commodities may be moved from the fumigation enclosure to storage areas, provided – the concentration of methyl bromide in the air spaces among the stacked commodities is measured to be 5 ppm or less, and – at least ten air exchanges have been completed in the fumigation enclosure. Treatment and aeration buffer zones were also established, and there were provisions for re-entry of these areas.

Subsequent discussions with the registrants regarding re-entry has occurred over the past several years, and the Agency is currently in the process of reviewing labels containing the TRED mitigation and as a result of these discussions. A summary of the pertinent sections regarding structures in the treatment and aeration buffer zones follow:

Steps must be taken to ensure that persons do not enter the structure until one air sample for methyl bromide, taken in the breathing zone on each floor of the structure after the termination of the aeration buffer zone indicates 1.0 ppm or less methyl bromide, with two exceptions:

- (1) provided continuous real-time monitoring, concentrations are 1 ppm or less within the structure occupied by occupational workers
- (2) If roads or other vehicle passageways are located within the treatment buffer zone or the aeration buffer zone, occupants of vehicles are permitted to travel through the buffer zone provided the transit period is 30 cumulative minutes in a 24-hour period

The Agency will update the methyl bromide docket with related materials as soon as this process is finalized. The methyl bromide TRED can be found at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0123-0231, and additional documents related to this decision are located in the methyl bromide docket: http://www.regulations.gov/#!docketBrowser;rpp=25;po=0;s=TRED;dct=SR;D=EPA-HQ-OPP-2005-0123.

As I mentioned in my earlier note the APHIS PPQ manual provides information but in case you want a contact at APHIS for further discussion I would recommend the 2 following people.

Scott Wood – CPHST (Center for Plant Health Science Technology), Director TQAU – USDA APHIS (Raleigh NC) 919-855-7451

Susan O'Toole – National Pesticide Coordinator USDA APHIS (River Rd. Beltsville MD) 301-851-2243

However, they had indicated they were already talking with Region 2 counsel on matters related to the incident. I would perhaps check with your Regional counsel as well to avoid any miscommunication.

I also copied a number of my colleagues here on this note to make sure they are aware [OPP folks please edit/correct as needed]

Thanks and please don't hesitate to ask for additional information.

Jeff

Jeffrey L Dawson

Chemist/Immediate Office

Health Effects Division

Office of Pesticide Programs, U.S. EPA

Phone: 703-305-7329

Email: dawson.jeff@epa.gov

From: Evangelista, Pat

Sent: Thursday, April 16, 2015 5:50 PM

To: Dawson, Jeffrey **Cc:** Maddaloni, Mark

Subject: Re: Methyl Bromide

Thank you Jeff, very much appreciated!

Sent from my iPhone

On Apr 16, 2015, at 2:06 PM, Dawson, Jeffrey < <u>Dawson.Jeff@epa.gov</u>> wrote:

Hi guys,

Just wanted to catch up with you. I am still working on getting you the additional information.

One thing I did manage to find out is that the lists of commodities I discussed in my earlier email from the APHIS PPQ Treatment manual is not supported by specific data. It basically tracks what is on the existing labeling. Sorry we can't provide more detailed information on off-gassing rates.
With regard to allowable levels in various food commodities. I would recommend looking at our food tolerances for methyl bromide available at:
http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr180_main_02.tpl
See the following specific links and note that most are established for the resulting bromine levels in those commodities.
http://www.ecfr.gov/cgi-bin/text-idx?SID=d37ea87290f58be8d6b6be0dbb1ac4a7&mc=true&node=se40.24.180_1123&rgn=div8
http://www.ecfr.gov/cgi-bin/text-idx?SID=d37ea87290f58be8d6b6be0dbb1ac4a7&mc=true&node=se40.24.180_1123a&rgn=div8
http://www.ecfr.gov/cgi-bin/text-idx?SID=d37ea87290f58be8d6b6be0dbb1ac4a7&mc=true&node=se40.24.180_1124&rgn=div8
I will try to get the rest of the information to you on Monday.
If you need me in the interim my personal cell is 301-676-5956.
Thanks

Jeff

Jeffrey L Dawson

Chemist/Immediate Office

Health Effects Division

Office of Pesticide Programs, U.S. EPA

Phone: 703-305-7329

Email: dawson.jeff@epa.gov

From: Evangelista, Pat

Sent: Wednesday, April 15, 2015 3:20 PM

To: Dawson, Jeffrey **Cc:** Housenger, Jack

Subject: RE: Methyl Bromide

Thank you Jeff, I'll forward this to Mark Maddaloni.

From: Dawson, Jeffrey

Sent: Wednesday, April 15, 2015 3:14 PM

To: Evangelista, Pat **Cc:** Housenger, Jack

Subject: RE: Methyl Bromide

Pat,

Here is the information we talked about on our call today. I'm sorry but I didn't catch the other person's name, can you please forward it to him?

Here is a link to the USDA PPQ Treatment Manual http://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf

Click on the tab on the left marked chemical treatments and start on page 2-3-1 where the section is on methyl bromide. The treatment schedule is there for various edible commodities (Table 2-3-1)so you may want to compare how much was used in the condo on a volume basis with the noted dosage rates just for comparison. Also, on page 2-3-7 there is a list of commodities known to be highly sorptive and it includes several building materials which could hamper the aeration and clearance efforts. Also they list materials which should not be fumigated (page 2-3-8) which includes items like feather pillows. Finally, I would really recommend looking at this chapter quite closely but especially focusing on the piece titled "Aerating Sorptive, Noncontainerized Cargo – Indoors and Outdoors" (pg 2-4-45).

Here's some info on the Drager tube samplers

http://www.draeger.com/sites/assets/PublishingImages/Products/cin_short-term_tubes/Attachments/tubeshandbook_br_9092086_en.pdf

check out pages 77 and 205 where the lowest tube range is 0.2 ppm

I am still working on finding the tolerance info which may be useful in helping frame some of this issue. I also am trying to touch base with the folks at USDA I mentioned to see if they can provide any more insight.

Thanks

Jeff

Jeffrey L Dawson

Chemist/Immediate Office

Health Effects Division

Office of Pesticide Programs, U.S. EPA

Phone: 703-305-7329

Email: dawson.jeff@epa.gov